# **Technology in Education**

To really leverage technology in education you need three components:

- 1. A strategic plan on how to develop, implement, and sustain the use of technology.
- 2. Systems and tools for delivery of instruction (ie learning management system, assessment system, longitudinal student data dashboards, digital content, etc).
- 3. Infrastructure to connect teachers, students, parents, and administrators to the systems and tools. (ie Bandwidth to districts, schools & communities, wireless access in classroom, computing device for students, teachers and administrators)

Without all three components, the use of technology in education typically fails.

### **High Degree of District Variation**

Number of Districts - 190

Number of students – 1,700,000

Largest district – 160,000 students

Smallest district - 300 students

10 of 190 have the funds and staff to develop and mange the three components

180 rely on the state to:

- Develop, implement, and maintain free system and tools
- Implement and maintain free infrastructure



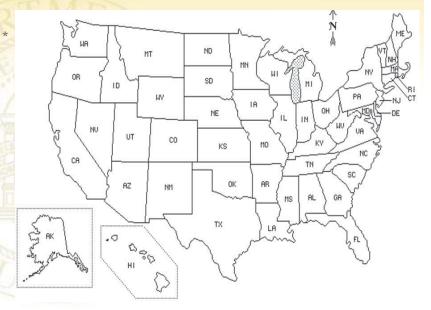


# **High Degree of District Variation**

Number of Districts – 16,275

Largest district - 667,273 students \*

Smallest district - 46 students \*



\*Based on 2011-12 NCES Statistics



#### Misconceptions and the Ability Gap

The vast majority of districts do not have the resources, time, or money to:

- 1. Develop and maintain a strategic plan on how to implement, train users, and sustain the use of technology.
- 2. Buy/develop and maintain systems and tools for delivery of instruction.
- 3. Buy/develop infrastructure to connect teachers, students, parents and administrators to the systems and tools.

Most districts rely on their state DOE for help with these three activities but most studies are done with large urban districts therefore it appears that districts do have these capabilities and what is done in large districts is scalable to a smaller district.

#### **Georgia's DOE Support for Districts**

We provide free and fully integrated statewide systems and tools:

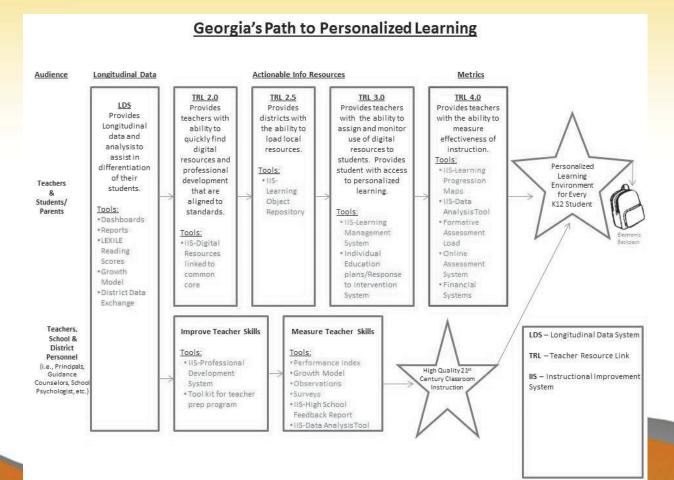
- Longitudinal data system
- Learning management system
- Assessment system
- Instructional Improvement system
- Individualized Educational Plans
- Digital content
- Parent Portal
- 3MM in DOE technology budget to sustain these systems

We provide free internet connectivity to every school

- Currently providing 3 MBPS
- Leveraging university network (Peachnet) to provide 100 MBPS by July 2015
- State covers all costs for broadband (5MM state funds and 15MM erate)
- State offers 40MM in competitive grant funds to bring broadband into the district, Connect schools to the district, install wireless in the classroom and acquire computing devices for students and teachers



### Georgia's Strategic Plan



# **Georgia's Current Capacity Per School**

- Bandwidth Provided by the State 3 mbps
- Bandwidth with District Subsidy 4-16 mbps
- Bandwidth with District Subsidy 17-32 mbps
- Bandwidth with District Subsidy 33-50 mbps
- Bandwidth with District Subsidy 51-99 mbps

And all of these districts have had Erate funds available for years







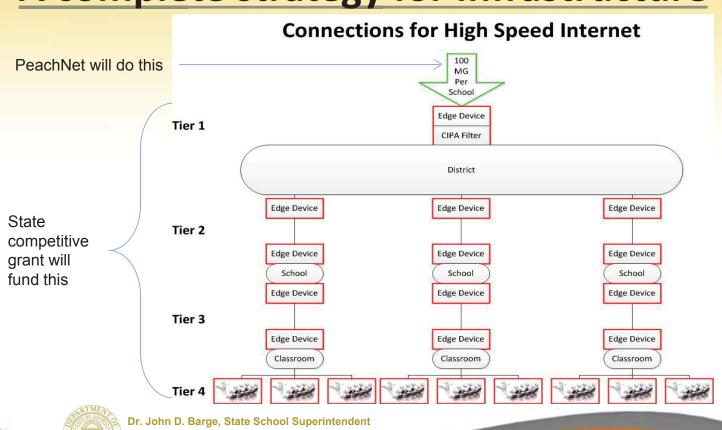
Bandwidth Provided by the State = 100 mbps

Via one state contract utilizing Erate funds





### A complete strategy for Infrastructure



#### **The Problems**

Focusing on infrastructure alone will not help Education integrate technology into the instructional process.

Without a set of sustainable systems and tools providing teachers with functionality, infrastructure is a waste of money.

Without a comprehensive strategic plan on how to leverage, implement, and sustain technology, efforts to integrate technology will fail.

Most districts do not have the resources, time or money to address or resolve these problems.

